



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,291	02/19/2004	Yutaka Katsuyama	826.1554D	3345

21171 7590 12/14/2006

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

BHATNAGAR, ANAND P

ART UNIT	PAPER NUMBER
----------	--------------

2624

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/781,291	Applicant(s) KATSUYAMA, YUTAKA	
	Examiner Anand Bhatnagar	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,37-39,41 and 43-46 is/are pending in the application.
- 4a) Of the above claim(s) 1-3,37-39 and 43-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41 and 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/358380.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's amendment filed on 09/21/06 has been entered and made of record.
2. Applicant has canceled claims 4-36, 40, and 42. Claims 41 and 46 have been amended. Claims 1-3, 37-39, and 43-45 are withdrawn. Currently claims 1-3, 37-39, 41, and 43-46 are pending. Examiner refers to the rejection below.

DETAILED ACTION

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 41 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ancin (U.S. patent 5,956,468) in view of Nakamura (U.S. patent 5,168,373).

Regarding claim 41: Ancin discloses a method of setting a labeling threshold (col. 7 line 65 to col. 8 line 5, col. 8 line 47 to col. 9 line 14, and col. 14 lines 44-67), comprising:

calculating a read resolution of an input image for each color element (col. 4 lines 5-15, wherein the resolution of the document is known/calculated to

determine the colors of each pixel, i.e. color element, in the image. This resolution is for each color element/pixel);

setting a labeling threshold of the input image as a first threshold value based on the read resolution for each color element (col. 9 lines 43-63, col. 11 lines 1-53, col. 18 lines 1-6, wherein the black/white points are determined and thresholds set in order to classify the pixels as either black, white, or color which is based on the resolution. There are multiple thresholds that are used to define the colors one is the variation of the colors wherein the black, white color, etc. are set values, i.e. thresholds and another is the run length of the pixels of the colors. This run length is another threshold which is used to determine if a pixel belongs to a specific color and it groups it with the specific color. Both of these thresholds are resolution dependent and both are read as labeling thresholds since they both label the pixel's colors.);

extracting a part of a unicolor pattern from the input image by comparing the first threshold and color information of the input image (col. 9 lines 44-63, wherein the pixels that are misclassified are classified based on a set of rules and the thresholds. This classification is read as extracting a part of the unicolor pattern since the colors of the pixels are defined);

Ancin does not teach the features of "correcting the first threshold to set a second threshold for determining a unicolor range with standard deviation obtained from color variance about the unicolor pattern extracted from the input image" and "extracting a remaining part of the unicolor pattern based on the

second threshold." Nakamura teaches to change/set a threshold for extracting certain colors in an image (Nakamura; col. 37 lines 23-50, wherein the thresholds are changed/set in order to extract/re-extract the similar color(s). The defining of the colors in an image is done by standard deviation and variances of the gray scale/color scale of the pixels in the image). It would have been obvious to one skilled in the art to combine the teaching of Nakamura to that of Ancin because they are analogous in extracting specific colors from images. One in the art would have been motivated to incorporate the teaching of Nakamura to that of Ancin in order to obtain similar colors in an image (Nakamura; col. 37 lines 45-48).

Regarding claim 46: A computer-readable storage medium storing a program used to control a processor to perform a method comprising:

obtaining read information about an input image by extracting a local area from the input image and extracting color difference information about the input image from the local area (col. 4 lines 5-15 and col. 8 lines 12-25, wherein the resolution, i.e. read information, of the document is known/calculated to determine the colors of each pixel, i.e. color element, in the image. Further, these is performed in a 5x5 window, i.e. a local area.);

calculating a read resolution of each color component of the input image (col. 4 lines 5-15, wherein the resolution of the document is known/calculated to determine the colors of each pixel, i.e. color element, in the image.);

setting a labeling threshold of the input image as a first threshold according to the read information about the input image by setting a labeling threshold for the input image according to the color difference information (col. 9 lines 43-63, col. 11 lines 1-53, col. 18 lines 1-6, wherein the black/white points are determined and thresholds set in order to classify the pixels as either black, white, or color which is based on the resolution. There are multiple thresholds that are used to define the colors one is the variation of the colors wherein the black, white color, etc. are set values, i.e. thresholds and another is the run length of the pixels of the colors. This run length is another threshold which is used to determine if a pixel belongs to a specific color and it groups it with the specific color. Both of these thresholds are resolution dependent and both are read as labeling thresholds since they both label the pixel's colors.);;

labeling the input image using the first threshold (col. 9 lines 43-63, col. 11 lines 1-53, col. 18 lines 1-6, wherein the black/white points are determined and thresholds set in order to classify the pixels as either black, white, or color which is based on the resolution.);

grouping a label pattern obtained by the labeling (col. 3 lines 3-15);

obtaining image information about a group according to image information about a pattern in a same group, including extracting a part of a unicolor pattern from the input image by comparing the first threshold and color information of the input image including (col. 9 lines 44-63, wherein the pixels that are misclassified are classified/grouped based on a set of rules and the thresholds. This

classification is read as extracting a part of the unicolor pattern since the colors of the pixels are defined); and

extracting a pattern according to image information about the group, including (col. 9 lines 44-63, wherein the pixels that are misclassified are classified based on a set of rules and the thresholds. This classification is read as extracting a part of the unicolor pattern since the colors of the pixels are defined);

Ancin does not teach the features of "correcting the first threshold," "setting a corrected first threshold as a second threshold for determining a unicolor range according to color information about the unicolor pattern extracted from the input image," or "extracting a remaining part of the unicolor pattern based on the second threshold."

Nakamura teaches to change/set a threshold for extracting certain colors in an image (Nakamura; col. 37 lines 23-50, wherein the thresholds are changed/set in order to extract/re-extract the similar color(s)). It would have been obvious to one skilled in the art to combine the teaching of Nakamura to that of Ancin because they are analogous in extracting specific colors from images. One in the art would have been motivated to incorporate the teaching of Nakamura to that of Ancin in order to obtain similar colors in an image (Nakamura; col. 37 lines 45-48).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand Bhatnagar whose telephone number is


(571) 272-7416, whose supervisor is Jingge Wu whose number is (571) 272-7429, Central fax is 571-273-8300, and Tech center 2600 customer service office number is 703-306-0377.



Anand Bhatnagar

Technology Division 2624

December 6, 2006



VIKKRAM BALI
PRIMARY EXAMINER